

YOUR
GUIDE
TO

Bendix

SEMICONDUCTORS

AVAILABLE IMMEDIATELY AT
SUMMIT DISTRIBUTORS
INDUSTRIAL ELECTRONIC PARTS CENTER
916 MAIN ST. - BUFFALO 2, N. Y.
TT 4-3450

YOUR GUIDE to

SEMICONDUCTOR DEVICES MEETING YOUR MOST CRITICAL DESIGN REQUIREMENT

HIGH FREQUENCY-HIGH POWER

BIG LeafTM SILICON PLANAR EPITAXIAL NPN TRANSISTORS page 1
ft = 200 mc minimum, >25 watts at 50 mc, IC = 2.5 A to 10 A, VCBO = 50 V to 100 V, SOAR specified.

SILICON DIFFUSED MESA NPN POWER TRANSISTORS pages 1 and 2
IC to 15 A, VCB to 200 V, Pc to 150 W.

DAP[®] DIFFUSED ALLOY POWER μ SEC SWITCHING TRANSISTORS pages 2 and 3
IC to 50 A, VCE to 350 V, switch up to 4500 W, SOAR specified.

HIGH POWER PNP ALLOY TRANSISTORS pages 3 and 4
IC to 25 A, VCE to 100 V, Pc to 150 W, SOAR specified.

PNP ALLOY POWER TRANSISTORS pages 4 thru 6
IC to 7 A, VCE to 100 V, SOAR specified.

LeafTM SILICON PLANAR EPITAXIAL NPN TRANSISTORS page 7
Low VCE(s) = 0.45 V at 0.5 A, ft = 220 mc minimum, VCBO = 40 V to 150 V, IC = 1 A maximum.

HIGH FREQUENCY Leaf-LetTM SILICON PLANAR EPITAXIAL NPN TRANSISTORS page 8
ft = 400 mc typical, low VCE(s) = 0.25 V at 150 mA, VCBO = 60 V, IC = 0.8 A maximum.

SILICON DIFFUSED POWER RECTIFIERS pages 8 and 9
Io to 12 A, PRV to 1000 V, single junction construction provides low forward drop.

MILITARY SEMICONDUCTORS pages 9 and 10
Silicon rectifiers, silicon NPN and germanium PNP transistors.

IGNISTORSTM page 10
A transistor with a matched zener diode together in one package. The zener protects the transistor against voltage transients. The transistor is SOAR specified for secondary breakdown protection.

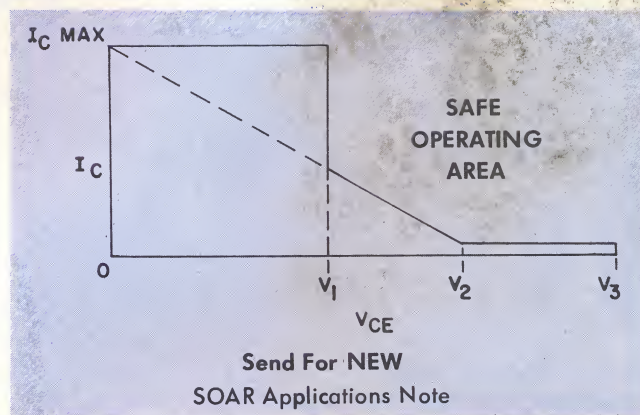
TRANSISTOR MOUNTING KITS page 10

SEMICONDUCTOR OUTLINES page 11

AVOID SECONDARY BREAKDOWN WITH BENDIX SOAR SPECIFIED TRANSISTORS

The new SOAR (Safe Operating Area) principle now makes it easy for you to specify the exact transistor for switching or DC applications.

Safe switching is now a reality as the transistor operates within the SOAR envelope. This envelope defines the region which encloses all of the points representing the simultaneous values of the collector current and the collector-to-emitter voltage which the transistor can safely handle during switching into any load. Exact conditions are specified for base current, switching time, junction temperature and average power dissipation.



BENDIX BIG Leaf™ RF SILICON PLANAR EPITAXIAL NPN TRANSISTORS

1

TYPE NUMBER	CASE TYPE	VCBO V	VCEO V	VEBO V	IC A	SOAR		Pc @ 25°C Case W	CURRENT GAIN hFE	CURRENT GAIN		SATURATION VOLTAGE		MAX COLLECTOR CUTOFF CURRENT		θJ-C °C/W	θJ-A °C/W
						V1 V	V2 V			IC A	VCE V	VCE(s) V	IC A	IB A	ICBO μA		
2N2657	TO-5	80	60	8	5	—	—	4	40-120	1	2	0.5	1	0.1	0.1	60	165
2N2658	TO-5	100	80	8	5	—	—	4	40-120	1	2	0.5	1	0.1	0.1	60	165
2N3016	TO-5	100	50	4	2.5	40	90	5	60-150	1	5	0.75	1	0.1	0.1	30	165
2N3017	MT-27	100	50	4	5	40	90	10	60-150	1	5	1	3	0.3	0.1	30	120
2N3018	TO-61	100	50	4	10	40	90	25	60-150	1	5	1	5	0.5	0.1	30	45
2N3619	TO-5	75	40	4	2.5	30	65	7.5	40 min	1	5	0.75	1	0.1	25	15	165
2N3620	MT-27	75	40	4	5	30	65	7.5	30 min	5	10	1	3	0.3	25	15	120
2N3621	TO-61	75	40	4	10	30	65	15	40 min	5	10	1.25	5	0.5	25	5	45
2N3622	TO-61	75	40	4	10	30	65	15	40 min	5	10	1.25	5	0.5	25	5	45
2N3623	TO-5	75	40	4	2.5	30	65	7.5	40 min	1	5	0.75	1	0.1	1	15	165
2N3624	MT-27	75	40	4	5	30	65	7.5	30 min	5	10	1	3	0.3	1	15	120
2N3625	TO-61	75	40	4	10	30	65	15	40 min	5	10	1.25	5	0.5	1	5	45
2N3626	TO-61	75	40	4	10	30	65	15	40 min	5	10	1.25	5	0.5	1	5	45
2N3627	TO-5	100	50	4	2.5	40	90	7.5	40 min	1	5	0.75	1	0.1	1	30	165
2N3628	MT-27	100	50	4	5	40	90	7.5	30 min	5	10	1	3	0.3	1	30	120
2N3629	TO-61	100	50	4	10	40	90	20	40 min	5	10	1.25	5	0.5	1	30	45
2N3630	TO-61	100	50	4	10	40	90	20	40 min	5	10	1.25	5	0.5	1	30	45

• Pulse Width = 300 μsec, duty cycle 2%. Tj = 200°C maximum. Tc = 40 msec typical. Cob = 50 pf maximum at VCBO = 30V.

BENDIX SILICON DIFFUSED MESA NPN POWER TRANSISTORS

TYPE NUMBER	CASE TYPE	VCBO V	VCEO V	IC A	SOAR		Pc @ 25°C CASE W	CURRENT GAIN hFE	CURRENT GAIN		SATURATION VOLTAGE		MAX COLLECTOR CUTOFF CURRENT		θJ-C °C/W
					V1 V	V2 V			IC A	VCE V	VCE(s) V	IC A	IB A	ICBO μA	
2N389	TO-53	60	—	2	—	—	85	12-60	1	15	1	1	0.2	10 mA	2
2N389A	TO-53	60	—	3	—	—	85	12-60	1	4	0.75	1	0.2	10 mA	2
2N424	TO-53	80	—	2	—	—	85	12-60	1	15	2	1	0.2	10 mA	2
2N424A	TO-53	80	—	3	—	—	85	12-60	1	15	0.75	1	0.2	10 mA	2
2N1015	MT-1	30	—	7.5	—	—	175	10 min	2	4	1.5	2	0.3	20 mA	0.7
2N1015A	MT-1	60	—	7.5	—	—	175	10 min	2	4	1.5	2	0.3	20 mA	0.7
2N1015B	MT-1	100	—	7.5	—	—	175	10 min	2	4	1.5	2	0.3	20 mA	0.7
2N1015C	MT-1	150	—	7.5	—	—	175	10 min	2	4	1.5	2	0.3	20 mA	0.7
2N1015D	MT-1	200	—	7.5	—	—	175	10 min	2	4	1.5	2	0.3	20 mA	0.7
2N1016	MT-1	30	—	7.5	—	—	175	10 min	5	4	2.5	5	0.75	20 mA	0.7
2N1016A	MT-1	60	—	7.5	—	—	175	10 min	5	4	2.5	5	0.75	20 mA	0.7
2N1016B	MT-1	100	—	7.5	—	—	175	10 min	5	4	2.5	5	0.75	20 mA	0.7
2N1016C	MT-1	150	—	7.5	—	—	175	10 min	5	4	2.5	5	0.75	20 mA	0.7
2N1016D	MT-1	200	—	7.5	—	—	175	10 min	5	4	2.5	5	0.75	20 mA	0.7
2N1067	TO-8	60	30	3	25	60	10	15-75	0.2	4	2	0.2	0.02	500	5
2N1068	TO-8	60	30	3	25	60	10	15-75	0.75	4	2	0.75	0.1	500	5
2N1069	TO-3	60	45	7.5	40	60	50	10-50	1.5	4	3	1.5	0.3	1000	1.5
2N1070	TO-3	60	45	7.5	40	60	50	10-50	1.5	4	1	1.5	0.3	1000	1.5
2N1208	TO-61	60	60	5	—	—	85	15 min	2	12	5	2	0.25	10 mA	2.06
2N1209	TO-61	45	45	5	—	—	85	20-80	2	12	5	2	0.25	20 mA	2.06
2N1210	TO-53	60	60	5	—	—	30	15-75	2	12	2	2	0.25	1000	2.5
2N1211	TO-53	80	80	5	—	—	30	15-75	1	12	2	2	0.25	1000	2.5
2N1212	TO-61	60	60	5	—	—	85	12-36	1	15	5	1	0.2	10 mA	2.06
2N1250	TO-53	60	60	5	—	—	85	15 min	2	12	5	2	0.25	10 mA	2.06
2N1483	TO-8	60	40	3	35	60	25	20-60	0.75	4	2	0.75	0.075	15	7
2N1484	TO-8	100	55	3	50	100	25	20-60	0.75	4	2	0.75	0.075	15	7
2N1485	TO-8	60	40	3	35	60	25	35-100	0.75	4	0.75	0.75	0.04	15	7
2N1486	TO-8	100	55	3	50	100	25	35-100	0.75	4	0.75	0.75	0.04	15	7
2N1487	TO-3	60	40	6	—	—	75	15-45	1.5	4	3	1.5	0.3	25	2.33
USA2N1487	TO-3	60	40	6	—	—	75	15-45	1.5	4	3	1.5	0.3	25	2.33
2N1488	TO-3	100	55	6	—	—	75	15-45	1.5	4	3	1.5	0.3	25	2.33
USA2N1488	TO-3	100	55	6	—	—	75	15-45	1.5	4	3	1.5	0.3	25	2.33
2N1489	TO-3	60	40	6	—	—	75	25-75	1.5	4	1	1.5	0.1	25	2.33
USA2N1489	TO-3	60	40	6	—	—	75	25-75	1.5	4	1	1.5	0.1	25	2.33
2N1490	TO-3	100	55	6	—	—	75	25-75	1.5	4	1	1.5	0.1	25	2.33
USA2N1490	TO-3	100	55	6	—	—	75	25-75	1.5	4	1	1.5	0.1	25	2.33
2N1511	TO-36	60	40	6	—	—	75	15-45	1.5	4	3	1.5	0.3	25	2.33
2N1512	TO-36	100	55	6	—	—	75	15-45	1.5	4	3	1.5	0.3	25	2.33
2N1513	TO-36	60	40	6	—	—	75	25-75	1.5	4	1	1.5	0.1	25	2.33
2N1514	TO-36	100	55	6	—	—	75	25-75	1.5	4	1	1.5	0.1	25	2.33
2N1616	TO-61	60	60	5	—	—	60	15-75	2	12	2	2	0.25	1000	2.5
2N1616A	TO-61	60	60	7.5	—	—	85	20-60	2	4	1	2	0.2	200	2
2N1617	TO-61	80	80	5	—	—	60	15-75	2	12	2	2	0.25	1000	2.5
2N1617A	TO-61	80	70	7.5	—	—	85	20-60	2	4	1	2	0.2	200	2
2N1618	TO-61	100	100	5	—	—	60	15-75	2	12	2	2	0.25	1000	2.5

BENDIX SILICON DIFFUSED MESA NPN POWER TRANSISTORS (CONT.)

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TYPE NUMBER	CASE TYPE	VCBO V	VCEO V	IC A	SOAR		Pc @ 25°C CASE W	CURRENT GAIN			MAX SATURATION VOLTAGE			MAX COLLECTOR CUTOFF CURRENT		θ_{J-C} °C/W
					V1 V	V2 V		hFE —	IC A	VCE V	VCE(s) V	IC A	IB A	ICBO μA	VCBO V	
2N1618A	TO-61	100	80	7.5	—	—	85	20-60	2	4	1	2	0.2	200	100	2
2N1620	TO-53	100	100	5	—	—	30	15-75	2	12	2	2	0.25	1000	100	2.5
2N1701	TO-8	60	40	2.5	—	—	25	20-80	0.3	4	1.5	0.3	0.03	750	60	7
2N1702	TO-3	60	40	5	—	—	75	11-60	0.8	4	3.2	0.8	0.08	200	30	2.33
2N1722	TO-53	120	80	7.5	70	120	100	20-90	2	15	1	2	0.2	500	3	1.5
2N1723	TO-53	120	80	7.5	70	120	100	50-150	2	15	1	2	0.2	100	3	1.5
2N1724	TO-61	120	80	7.5	70	120	100	20-90	2	15	1	2	0.2	500	3	1.5
2N1725	TO-61	120	80	7.5	70	120	100	50-150	2	15	1	2	0.2	100	3	1.5
2N2032	TO-53	45	45	5	—	—	85	20 min	2	12	5	2	0.25	20 mA	45	2.06
2N2035	TO-8	80	60	3	—	—	25	20-60	1.5	4	0.45	1.5	0.15	150	80	7
2N2101	TO-61	60	40	3	—	—	75	15-60	1	15	1.5	1	0.2	30	1	2
2N2304	TO-8	60	40	3	—	—	25	20-80	0.3	4	0.9	0.3	0.06	100	30	7
2N2305	TO-3	60	40	6	—	—	75	15-60	0.8	4	1.2	0.6	0.16	200	30	2.33
2N2338	TO-36	60	40	7.5	—	—	150	15-60	3	4	1.5	3	0.3	200	30	1.17
2N3055	TO-3	100	60	15	—	—	115	20-70	4	4	1.1	4	0.4	5000	100	1.5
2N3232	TO-3	80	60	7.5	—	—	117	18-55	3	10	2.5	3	0.2	5000	80	1.5
2N3235	TO-3	65	55	15	—	—	117	20-70	4	4	1.1	4	0.4	5000	90	1.5

♦ICER, R = 33 ohms, Tc = 100°C. ■ICEX, VBE = 1.5V, Tc = 150°C. ▲ICES, Tc = 150°C. Tj = 200°C maximum. Tj = 50 msec typical.
f_{ae} = 20 kc typical except for 2N1722–2N1725 where ft = 10 mc minimum; 3 mc minimum for 2N1616–2N1618 and 2N1620.

BENDIX DAP[®] DIFFUSED ALLOY POWER μSEC SWITCHING TRANSISTORS

TYPE NUMBER	CASE TYPE	VCBO V	IC A	V1 V	SOAR		Pc @ 25°C CASE W	CURRENT GAIN hFE —	IC A	MAX SATURATION VOLTAGE			MAX COLLECTOR CUTOFF CURRENT		θ_{J-C} °C/W	TYPICAL f _{ae} ▲ kc
					V2 V					VCE(s) V	IC A	IB A	ICBO μA	VCBO V		
2N1073	TO-41	40	10	30	70	60	20-60	5	0.5	5	0.5	200	2	0.8	5	
2N1073A	TO-41	80	10	50	90	60	20-60	5	0.5	5	0.5	200	2	0.8	5	
2N1073B	TO-41	120	10	70	110	60	20-60	5	0.5	5	0.5	200	2	0.8	5	
2N1430	TO-41	80	10	80	120	50	30-100	5	0.4	10	1.0	200	2	1.2	5	
2N1651	TO-41	60	25	20	60	100	20 min	25	0.65	25	2.5	300	2	0.8	10	
USA2N1651	TO-41	60	25	—	—	100	35-100	10	0.65	25	2.5	300	2	0.8	10	
2N1652	TO-41	100	25	40	80	100	20 min	25	0.65	25	2.5	300	2	0.8	10	
USA2N1652	TO-41	100	25	—	—	100	35-100	10	0.65	25	2.5	300	2	0.8	10	
2N1653	TO-41	120	25	60	100	100	20 min	25	0.65	25	2.5	300	2	0.8	10	
USA2N1653	TO-41	120	25	—	—	100	35-100	10	0.65	25	2.5	300	2	0.8	10	
2N1751	TO-3	80	25	40	80	90	30-90	20	0.5	20	2.5	300	2	0.8	10	
2N2212	TO-41	120	10	70	110	60	50-120	5	0.5	5	0.5	200	2	0.8	5	
2N2282	TO-37	60	3	30	70	5	30-90	0.5	0.4	1	0.05	50	1	15	20	
2N2283	TO-37	100	3	50	90	5	30-90	0.5	0.4	1	0.05	50	1	15	20	
2N2284	TO-37	200	3	70	110	5	30-90	0.5	0.4	1	0.05	50	1	15	20	
2N2285	TO-3	60	25	20	60	100	20 min	25	0.65	25	2.5	300	2	0.8	10	
2N2286	TO-3	100	25	40	80	100	20 min	25	0.65	25	2.5	300	2	0.8	10	
2N2287	TO-3	120	25	60	100	100	20 min	25	0.65	25	2.5	300	2	0.8	10	
2N2288	TO-3	40	10	30	70	60	20-60	5	0.5	5	0.5	200	2	0.8	5	
2N2289	TO-3	80	10	50	90	60	20-60	5	0.5	5	0.5	200	2	0.8	5	
2N2290	TO-3	120	10	70	110	60	20-60	5	0.5	5	0.5	200	2	0.8	5	
2N2291	TO-3	40	10	30	70	60	50-120	5	0.5	5	0.5	200	2	0.8	5	
2N2292	TO-3	80	10	50	90	60	50-120	5	0.5	5	0.5	200	2	0.8	5	
2N2293	TO-3	120	10	70	110	60	50-120	5	0.5	5	0.5	200	2	0.8	5	
2N2294	TO-41	40	10	30	70	60	50-120	5	0.5	5	0.5	200	2	0.8	5	
2N2295	TO-41	80	10	50	90	60	50-120	5	0.5	5	0.5	200	2	0.8	5	
2N2296	TO-41	120	10	70	110	60	50-120	5	0.5	5	0.5	200	2	0.8	5	
2N2357	TO-41	60	50	15	55	170	15 min	50	0.9	50	5	300	2	0.5	10	
2N2358	TO-41	100	50	30	70	170	15 min	50	0.9	50	5	300	2	0.5	10	
2N2359	TO-41	120	50	50	90	170	15 min	50	0.9	50	5	300	2	0.5	10	
2N2467	TO-5	60	3	30	70	5	30-90	0.5	0.4	1	0.05	50	1	15	20	
2N2468	TO-5	100	3	50	90	5	30-90	0.5	0.4	1	0.05	50	1	15	20	
2N2469	TO-5	200	3	70	110	5	30-90	0.5	0.4	1	0.05	50	1	15	20	
2N2636	TO-41	100	25	40	80	100	20 min	25	0.65	25	2.5	300	2	0.8	10	
2N2637	TO-41	100	25	60	100	100	20 min	25	0.65	25	2.5	300	2	0.8	10	
2N2638	TO-41	100	25	80	120	100	20 min	25	0.65	25	2.5	300	2	0.8	10	
2N3461	TO-5	60	3	—	—	5	20 min	1	0.4	1	0.05	50	1	15	10	
B-10142	TO-3	350	10	100	150/300★	30	20 min	6	0.5	6	0.5	200	2	1.5	8	
B-10142A	TO-3	290	10	85	125/250★	30	20 min	6	0.5	6	0.5	200	2	1.5	8	
B-10142B	TO-3	225	10	70	100/200★	30	20 min	6	0.5	6	0.5	200	2	1.5	8	
B-10143	TO-3	290	15	85	125/250★	40	25 min	9	0.75	9	0.5	200	2	1.5	8	
B-10143A	TO-3	225	15	70	100/200★	40	25 min	9	0.75	9	0.5	200	2	1.5	8	
B-10143B	TO-3	165	15	55	75/150★	40	25 min	9	0.75	9	0.5	200	2	1.5	8	
B-10474	TO-3	60	10	45	60	40	50-400	0.4	—	—	—	2000	60	2	8	
B-10475	TO-3	60	10	45	100/150★	40	50-400	0.4	0.7	3	0.1	2000	100	2.5	8	

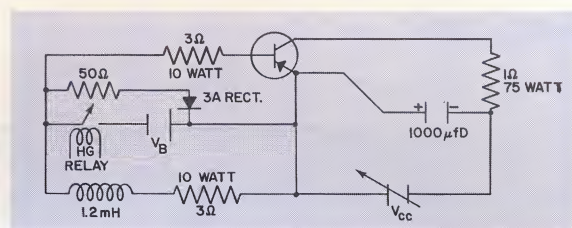
★V2 and V3 SOAR values respectively. ▲f_{ae} at 1 kc with IC = -0.5 A, VCE = -10 V. Tj = 110°C maximum.
Emitter lead diameter is 0.060 inch for all 25 A and 50 A TO-3 types.

TYPICAL DAP[®] SWITCHING TIMES

3

TYPE NUMBER	IC MAX IN A	tr μsec	ts μsec	tf μsec
2N2283	3	7.0	1.0	1.75
B-10142	6	3.0	2.5	1.2
B-10143	9	3.5	2.0	1.5
*2N1073	10	6.5	4.0	4.5
*2N1653	25	8.0	2.2	7
*2N2359	50	14	3.5	12

*Measurement made with low duty cycle. IB = ± 0.1 @ IC max.



BENDIX HIGH POWER PNP ALLOY TRANSISTORS

TYPE NUMBER	CASE TYPE	VCBO V	VCEO V	VEBO V	IC A	SOAR V1 V	V2 V	Pc @ 25°C CASE W	CURRENT GAIN hFE	IC A	SATURATION VCE(s) V	MAX VOLTAGE IC A	IB A	MAX CUTOFF CURRENT ICBO mA	VCBO V	θ J-C °C/W
2N511	TO-41	40	30	30	25	30	40	150	20-60	10	0.5	10	1.5	2	20	0.5
2N511A	TO-41	60	40	30	25	40	60	150	20-60	10	0.5	10	1.5	2	30	0.5
2N511B	TO-41	80	45	30	25	45	70	150	20-60	10	0.5	10	1.5	2	40	0.5
2N512	TO-41	40	30	30	25	30	40	150	20-60	15	1	15	2.25	2	20	0.5
2N512A	TO-41	60	40	30	25	40	60	150	20-60	15	1	15	2.25	2	30	0.5
2N512B	TO-41	80	45	30	25	45	70	150	20-60	15	1	15	2.25	2	40	0.5
2N513	TO-41	40	30	30	25	30	40	150	20-60	20	1.5	20	3	2	20	0.5
2N513A	TO-41	60	40	30	25	40	60	150	20-60	20	1.5	20	3	2	30	0.5
2N513B	TO-41	80	45	30	25	45	70	150	20-60	20	1.5	20	3	2	40	0.5
2N514	TO-41	40	30	30	25	30	40	150	20-60	25	2	25	3.75	2	20	0.5
2N514A	TO-41	60	40	30	25	40	60	150	20-60	25	2	25	3.75	2	30	0.5
2N514B	TO-41	80	45	30	25	45	70	150	20-60	25	2	25	3.75	2	40	0.5
2N627	TO-41	40	—	12	10	—	—	90	10-30	10	1	10	1	0.2	2	0.8
2N628	TO-41	60	—	12	10	—	—	90	10-30	10	1	10	1	0.2	2	0.8
2N629	TO-41	80	—	12	10	—	—	90	10-30	10	1	10	1	0.2	2	0.8
2N630	TO-41	100	—	12	10	—	—	90	10-30	10	1	10	1	0.2	2	0.8
2N677	TO-3	50	20	10	25	20	40	90	20-60	10	1	10	1	2	15	0.8
2N677A	TO-3	60	30	15	25	30	50	90	20-60	10	1	10	1	2	25	0.8
2N677B	TO-3	90	60	15	25	50	70	90	20-60	10	1	10	1	2	60	0.8
2N677C	TO-3	100	70	15	25	60	80	90	20-60	10	1	10	1	2	60	0.8
2N678	TO-3	50	20	10	25	20	40	90	50-100	10	1	10	1	2	15	0.8
2N678A	TO-3	60	30	15	25	30	50	90	50-100	10	1	10	1	2	25	0.8
2N678B	TO-3	90	60	15	25	50	70	90	50-100	10	1	10	1	2	60	0.8
2N678C	TO-3	100	70	15	25	60	80	90	50-100	10	1	10	1	2	60	0.8
2N1031	TO-41	50	20	10	25	20	40	90	20-60	10	1	10	1	2	15	0.8
2N1031A	TO-41	60	30	15	25	30	50	90	20-60	10	1	10	1	2	25	0.8
2N1031B	TO-41	90	60	15	25	50	70	90	20-60	10	1	10	1	2	60	0.8
2N1031C	TO-41	100	70	15	25	60	80	90	20-60	10	1	10	1	2	60	0.8
2N1032	TO-41	50	20	10	25	20	40	90	50-100	10	1	10	1	2	15	0.8
2N1032A	TO-41	60	30	15	25	30	50	90	50-100	10	1	10	1	2	25	0.8
2N1032B	TO-41	90	60	15	25	50	70	90	50-100	10	1	10	1	2	60	0.8
2N1032C	TO-41	100	70	15	25	60	80	90	50-100	10	1	10	1	2	60	0.8
2N1120	TO-41	80	40	40	15	35	60	45	20-50	10	1	10	1	0.3	2	1.5
USA 2N1120	TO-41	80	40	40	15	—	—	45	20-50	10	1	10	1	0.3	2	1.5
2N1146	TO-3	40	20	30	20	15	35	90	60-150	5	1	15	1	4	20	0.8
2N1146A	TO-3	60	30	30	20	25	50	90	60-150	5	1	15	1	4	30	0.8
2N1146B	TO-3	80	40	30	20	35	60	90	60-150	5	1	15	1	4	40	0.8
2N1146C	TO-3	100	50	30	20	45	70	90	60-150	5	1	15	1	4	50	0.8
2N1147	TO-41	40	20	30	20	15	35	90	60-150	5	1	15	1	4	20	0.8
2N1147A	TO-41	60	30	30	20	25	50	90	60-150	5	1	15	1	4	30	0.8
2N1147B	TO-41	80	40	30	20	35	60	90	60-150	5	1	15	1	4	40	0.8
2N1147C	TO-41	100	50	30	20	45	70	90	60-150	5	1	15	1	4	50	0.8
2N1162	TO-3	50	25	20	25	25	35	90	15-65	25	0.8	25	1.6	0.225	2	0.8
2N1162A	TO-3	50	20	25	25	20	35	90	15-65	25	0.8	25	1.6	0.225	2	0.8
2N1163	TO-41	50	25	20	25	25	35	90	15-65	25	0.8	25	1.6	0.225	2	0.8
2N1163A	TO-41	50	20	25	25	20	35	90	15-65	25	0.8	25	1.6	0.225	2	0.8
2N1164	TO-3	80	35	25	25	30	55	90	15-65	25	0.8	25	1.6	0.225	2	0.8
2N1164A	TO-3	80	40	40	25	35	60	90	15-65	25	0.8	25	1.6	0.225	2	0.8
2N1165	TO-41	80	35	25	25	30	55	90	15-65	25	0.8	25	1.6	0.225	2	0.8
USN 2N1165	TO-41	80	40	40	25	—	—	90	15-65	25	1	25	1.6	0.225	2	0.8
2N1165A	TO-41	80	40	40	25	35	60	90	15-65	25	0.8	25	1.6	0.225	2	0.8
2N1166	TO-3	100	45	30	25	40	65	90	15-65	25	0.8	25	1.6	0.225	2	0.8
2N1166A	TO-3	100	50	50	25	45	75	90	15-65	25	0.8	25	1.6	0.225	2	0.8
2N1167	TO-41	100	45	30	25	40	65	90	15-65	25	0.8	25	1.6	0.225	2	0.8
2N1167A	TO-41	100	50	50	25	45	75	90	15-65	25	0.8	25	1.6	0.225	2	0.8
2N1549	TO-3	40	20	20	15	30	50	90	10-30	10	1	10	1	0.2	2	0.8
2N1549A	TO-3	40	20	20	15	30	40	90	10-30	10	1	10	1	0.2	2	0.8
2N1550	TO-3	60	30	30	15	40	60	90	10-30	10	1	10	1	0.2	2	0.8
2N1550A	TO-3	60	30	30	15	40	60	90	10-30	10	1	10	1	0.2	2	0.8
2N1551	TO-3	80	40	40	15	50	70	90	10-30	10	1	10	1	0.2	2	0.8

BENDIX HIGH POWER PNP ALLOY TRANSISTORS (CONT.)

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TYPE NUMBER	CASE TYPE	VCBO V	VCEO V	VEBO V	IC A	SOAR		Pc @ 25°C CASE W	CURRENT GAIN hFE	IC A	MAX SATURATION VOLTAGE			MAX COLLECTOR CUTOFF CURRENT		θJ-C °C/W
						V1 V	V2 V				VCE(s) V	IC A	IB A	ICBO mA	VCBO V	
2N1551A	TO-3	80	40	40	15	50	70	90	10-30	10	1	10	1	0.2	2	0.8
2N1552	TO-3	100	50	50	15	60	80	90	10-30	10	1	10	1	0.2	2	0.8
2N1552A	TO-3	100	50	50	15	60	80	90	10-30	10	1	10	1	0.2	2	0.8
2N1553	TO-3	40	20	20	15	—	—	90	30-60	10	0.7	10	1	0.2	2	0.8
2N1553A	TO-3	40	20	20	15	—	—	90	30-60	10	0.7	10	1	0.2	2	0.8
2N1554	TO-3	60	30	30	15	—	—	90	30-60	10	0.7	10	1	0.2	2	0.8
2N1554A	TO-3	60	30	30	15	—	—	90	30-60	10	0.7	10	1	0.2	2	0.8
2N1555	TO-3	80	40	40	15	—	—	90	30-60	10	0.7	10	1	0.2	2	0.8
2N1555A	TO-3	80	40	40	15	—	—	90	30-60	10	0.7	10	1	0.2	2	0.8
2N1556	TO-3	100	50	50	15	—	—	90	30-60	10	0.7	10	1	0.2	2	0.8
2N1556A	TO-3	100	50	50	15	—	—	90	30-60	10	0.7	10	1	0.2	2	0.8
2N1557	TO-3	40	20	20	15	—	—	90	50-100	10	0.5	10	1	0.2	2	0.8
2N1557A	TO-3	40	20	20	15	—	—	90	50-100	10	0.5	10	1	0.2	2	0.8
2N1558	TO-3	60	30	30	15	—	—	90	50-100	10	0.5	10	1	0.2	2	0.8
2N1558A	TO-3	60	30	30	15	—	—	90	50-100	10	0.5	10	1	0.2	2	0.8
2N1559	TO-3	80	40	40	15	—	—	90	50-100	10	0.5	10	1	0.2	2	0.8
2N1559A	TO-3	80	40	40	15	—	—	90	50-100	10	0.5	10	1	0.2	2	0.8
2N1560	TO-3	100	50	50	15	—	—	90	50-100	10	0.5	10	1	0.2	2	0.8
2N1560A	TO-3	100	50	50	15	—	—	90	50-100	10	0.5	10	1	0.2	2	0.8
2N2445	TO-41	100	50	50	15	—	—	90	30-60	10	1	10	1	0.2	2	0.8

Tj = 100°C. τj = 300 μsec typical. fae = 4 kc typical. Emitter lead diameter is 0.060 inch for all 20 A and 25 A TO-3 types.

BENDIX PNP ALLOY POWER TRANSISTORS

TYPE NUMBER	CASE TYPE	VCBO V	VCEO V	VEBO V	IC A	SOAR		Pc @ 25°C CASE W	CURRENT GAIN hFE	IC A	MAX SATURATION VOLTAGE			MAX COLLECTOR CUTOFF CURRENT		θJ-C °C/W
						V1 V	V2 V				VCE(s) V	IC A	IB A	ICBO mA	VCBO V	
2N155	TO-3	30	—	15	3	—	—	50	24 min	0.5	0.65	1	0.1	10□	30	1.2
2N176	TO-3	30	—	10	3	—	—	25	25-90	0.5	—	—	—	3	30	1.5
2N234A	TO-3	25	—	—	3	—	—	25	25◇	0.42	—	—	—	5	25	2
2N235A	TO-3	35	—	15	3	—	—	25	30-40◇	0.76	0.8	1	0.1	1	25	2
2N235B	TO-3	35	—	15	3	—	—	25	34-40◇	0.42	0.8	1	0.1	1	25	2
2N236A	TO-3	35	—	15	3	—	—	25	34-40◇	0.76	1	3	0.3	1	25	2
2N236B	TO-3	35	—	15	3	—	—	25	34-40◇	0.76	1	3	0.3	1	25	2
2N242	TO-3	45	—	—	3	—	—	50	33-39◇	0.5	1	2	0.2	3	45	1.5
2N250	TO-3	30	—	15	2	—	—	12	30 min	0.5	0.8	1	0.1	1	30	1
2N250A	TO-3	30	25	20	7	—	—	90	25-100	3	0.7	3	0.15	1	30	0.8
2N251	TO-3	60	—	15	2	—	—	12	30 min	0.5	0.8	1	0.1	2	60	1
2N251A	TO-3	60	35	20	7	—	—	90	25-100	3	0.7	3	0.15	2	60	0.8
2N255	TO-3	15	—	15	3	—	—	25	20 min	0.5	1	2	0.2	3	14	3
2N255A	TO-3	15	—	—	4	—	—	20	25◇	0.42	—	—	—	5	15	3
2N256	TO-3	30	—	30	3	—	—	25	22◇	0.5	1	1	0.1	3	28	3
2N256A	TO-3	25	—	—	4	—	—	20	25◇	0.42	—	—	—	5	25	3
2N257	TO-3	40	—	6	3	—	—	25	20◇	0.42	—	—	—	2	40	2
2N268	TO-3	80	—	6	3	—	—	25	28◇	0.5	—	—	—	2	80	1.5
2N268A	TO-3	80	—	6	3	—	—	35	20 min	2	1	2	0.2	2	80	1.5
2N285A	TO-3	35	—	15	3	—	—	25	38◇	0.42	0.5	1	0.1	1	25	2
2N285B	TO-3	35	—	15	3	—	—	25	38◇	0.42	0.5	1	0.1	0.08	15	2
2N296	TO-3	60	—	15	2	—	—	20	19 min	1	1	1	0.1	1.5	60	2
2N297A	TO-3	60	40	40	5	40	60	35	40-100	0.5	1	2	0.2	0.2	2	2
JAN2N297A	TO-3	80	40	40	5	—	—	50	40-100	0.5	0.7	2	0.2	0.15	2	1.5
USA2N297A	TO-3	60	40	40	5	—	—	35	40-100	0.5	1	2	0.2	0.2	2	2
2N301	TO-3	40	—	10	3	—	—	25	30◇	0.5	—	—	—	5	40	2
2N301A	TO-3	60	—	10	3	—	—	25	30◇	0.5	—	—	—	5	60	1.5
2N307	TO-3	35	—	—	1	—	—	25	20 min	0.2	1	0.2	0.02	15	35	5
2N307A	TO-3	35	—	—	1	—	—	25	20 min	0.5	0.8	1	0.1	7	35	3
2N350	TO-3	40	—	10	3	—	—	65	30-33◇	0.7	—	—	—	3	30	1
2N350A	TO-3	50	—	10	3	—	—	60	30-33◇	0.7	1.75	3	0.3	3	30	1.2
2N351	TO-3	40	—	10	3	—	—	65	32-35◇	0.7	—	—	—	3	30	1
2N351A	TO-3	50	—	10	4	—	—	60	32-35◇	0.7	1.75	4	0.4	3	30	1.2
2N375	TO-3	80	—	20	5	40	70	90	35-90	1	1	2	0.2	3	60	0.8
2N376	TO-3	40	—	10	3	—	—	65	34-37◇	0.7	—	—	—	3	30	1
2N376A	TO-3	50	—	10	5	—	—	60	34-37◇	0.7	1.75	5	0.5	3	30	1.2
2N378	TO-3	40	—	12	5	—	—	50	15-45	2	1	2	0.2	0.5	25	1.2
2N379	TO-3	80	40	12	5	—	—	50	20-70	2	1	2	0.2	0.5	25	1.2
2N380	TO-3	60	30	12	5	—	—	50	30-70	2	1	2	0.2	0.5	25	1.2
2N399	TO-3	35	—	15	3	—	—	25	36-40◇	0.42	1	1.2	0.12	1	25	2

BENDIX PNP ALLOY POWER TRANSISTORS (CONT.)

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TYPE NUMBER	CASE TYPE	VCBO V	VCEO V	VEBO V	IC A	SOAR		Pc @ 25°C CASE W	CURRENT hFE	GAIN IC A	MAX SATURATION VOLTAGE			MAX COLLECTOR CUTOFF CURRENT		θJ-C °C/W
						V1 V	V2 V				VCE(s) V	IC A	IB A	ICBO mA	VCBO V	
2N400	TO-3	35	—	15	3	—	—	35	30-40◇	1.3	1	3	0.3	2	25	2
2N401	TO-3	35	—	15	3	—	—	25	31-36◇	0.42	1	1.2	0.12	1	25	2
2N418	TO-3	75	—	15	5	50	80	25	40 min	4	2	4	0.4	2	60	2
2N419	TO-3	40	—	15	3	—	—	25	35◇	0.42	—	—	—	1	25	2
2N420	TO-3	40	—	15	5	20	40	25	40 min	4	2	4	0.4	1	25	2
2N420A	TO-3	65	—	15	5	40	70	25	40 min	4	2	4	0.4	2	60	2
2N456	TO-3	40	—	20	5	—	—	50	10 min	5	1	5	1	0.5	20	1.1
2N456A	TO-3	50	30	20	7	—	—	150	30-90	5	0.5	5	0.5	2	40	0.5
USA2N456A	TO-3	40	20	10	7	—	—	150	11-33	5	0.5	5	0.5	0.5	20	0.5
2N456B	TO-3	50	30	20	7	—	—	150	30-90	5	0.5	5	0.5	2	40	0.5
2N457	TO-3	60	—	20	5	—	—	50	10 min	5	1	5	1	0.5	30	1.1
2N457A	TO-3	60	40	20	7	—	—	150	30-90	5	0.5	5	0.5	0.5	30	0.5
USA2N457A	TO-3	60	30	20	7	—	—	150	11-33	5	0.5	5	0.5	0.5	30	0.5
2N457B	TO-3	60	40	20	7	—	—	150	30-90	5	0.5	5	0.5	0.5	30	0.5
2N458	TO-3	80	—	20	5	—	—	50	10 min	5	1	5	1	0.5	40	1.1
2N458A	TO-3	80	45	20	7	—	—	150	30-90	5	0.5	5	0.5	0.5	40	0.5
USA2N458A	TO-3	80	40	10	7	—	—	150	11-33	5	0.5	5	0.5	0.5	40	0.5
2N458B	TO-3	80	45	20	7	—	—	150	30-90	5	0.5	5	0.5	0.5	40	0.5
2N553	TO-3	80	40	40	4	—	—	25	45 min	0.5	0.9	3	0.5	0.05	2	2
2N554	TO-3	30	—	10	3	—	—	25	25◇	0.42	1	3	0.3	7	30	2
2N555	TO-3	30	—	10	3	—	—	65	20 min	0.5	—	—	—	7	30	1
2N561	TO-3	80	50	12	5	—	—	50	20-50	4	0.8	4	0.4	0.15	0.5	1.5
2N618	TO-3	60	—	12	3	40	70	90	60-140	1	0.8	2	0.2	3	60	0.8
2N637	TO-3	60	30	15	5	25	50	90	30-60	3	1.5	3	0.3	0.2	2	0.8
2N637A	TO-3	90	55	15	5	50	80	90	30-60	3	1.5	3	0.3	0.2	2	0.8
2N637B	TO-3	100	65	15	5	60	90	90	30-60	3	1.5	3	0.3	0.2	2	0.8
2N638	TO-3	60	30	15	5	25	50	90	20-40	3	2	3	0.3	0.2	2	0.8
2N638A	TO-3	90	55	15	5	50	80	90	20-40	3	2	3	0.3	0.2	2	0.8
2N638B	TO-3	100	60	15	5	60	90	90	20-40	3	2	3	0.3	0.2	2	0.8
2N665	TO-3	80	40	40	5	—	—	35	40-80	0.5	0.9	3	0.22	0.05	2	2
2N669	TO-3	40	—	10	3	—	—	40	250 max	0.5	—	—	—	3	30	0.7
2N1011	TO-3	80	40	40	5	40	70	35	30-75	3	1.5	3	0.2	0.2	2	2
USA2N1011	TO-3	80	40	40	5	—	—	45	30-75	3	1.5	3	0.2	0.2	2	2
2N1021	TO-3	100	50	20	7	45	60	150	30-90	3	0.5	5	0.5	0.5	50	0.5
USA2N1021	TO-3	100	50	10	7	—	—	150	11-33	5	0.5	5	0.5	0.5	50	0.5
2N1021A	TO-3	100	50	30	7	45	60	150	30-90	5	0.5	5	0.5	0.5	50	0.5
2N1022	TO-3	120	55	20	7	50	65	150	30-90	5	0.5	5	0.5	0.5	60	0.5
USA2N1022	TO-3	120	50	10	7	—	—	150	11-33	5	0.5	5	0.5	0.5	60	0.5
2N1022A	TO-3	120	55	30	7	50	65	150	30-90	5	0.5	5	0.5	0.5	60	0.5
2N1038	TO-5	40	30	20	3	30	60	20	20-60	1	0.25	1	0.1	0.125	20	3.75
2N1038-1	MT-27	40	30	20	3	30	60	20	20-60	1	0.25	1	0.1	0.125	20	3.75
2N1038-2	MT-28	40	30	20	3	30	60	20	20-60	1	0.25	1	0.1	0.125	20	3.75
2N1039	TO-5	60	40	20	3	40	70	20	20-60	1	0.25	1	0.1	0.125	30	3.75
JAN2N1039	TO-5	60	40	20	3	—	—	20	20-60	1	0.25	1	0.1	0.125	30	3.75
USN2N1039	TO-5	60	40	20	3	—	—	20	20-60	1	0.25	1	0.1	0.125	30	3.75
2N1039-1	MT-27	60	40	20	3	40	70	20	20-60	1	0.25	1	0.1	0.125	30	3.75
2N1039-2	MT-28	60	40	20	3	40	70	20	20-60	1	0.25	1	0.1	0.125	30	3.75
2N1040	TO-5	80	50	20	3	50	80	20	20-60	1	0.25	1	0.1	0.125	40	3.75
2N1040-1	MT-27	80	50	20	3	50	80	20	20-60	1	0.25	1	0.1	0.125	40	3.75
2N1040-2	MT-28	80	50	20	3	50	80	20	20-60	1	0.25	1	0.1	0.125	40	3.75
2N1041	TO-5	100	60	20	3	60	90	20	20-60	1	0.25	1	0.1	0.125	50	3.75
JAN2N1041	TO-5	100	60	20	3	—	—	20	20-60	1	0.25	1	0.1	0.070	50	3.75
USN2N1041	TO-5	100	60	20	3	—	—	20	20-60	1	0.25	1	0.1	0.125	50	3.75
2N1041-1	MT-27	100	60	20	3	60	90	20	20-60	1	0.25	1	0.1	0.125	50	3.75
2N1041-2	MT-28	100	60	20	3	60	90	20	20-60	1	0.25	1	0.1	0.125	50	3.75
2N1042	MT-28	40	30	20	3.5	30	60	20	20-60	3	0.75	3	0.3	0.125	20	3.75
USA2N1042	MT-28	40	30	20	3	—	—	20	20-60	0.5	0.75	3	0.3	0.125	20	3.5
2N1042-1	MT-27	40	30	20	3.5	30	60	20	20-60	3	0.75	3	0.3	0.125	20	3.75
2N1042-2	TO-5	40	30	20	3.5	30	60	20	20-60	3	0.75	3	0.3	0.125	20	3.75
2N1043	MT-28	60	40	20	3.5	40	70	20	20-60	3	0.75	3	0.3	0.125	30	3.75
USA2N1043	MT-28	60	40	20	3	—	—	20	20-60	0.5	0.75	3	0.3	0.125	30	3.5
2N1043-1	MT-27	60	40	20	3.5	40	70	20	20-60	3	0.75	3	0.3	0.125	30	3.75
2N1043-2	TO-5	60	40	20	3.5	40	70	20	20-60	3	0.75	3	0.3	0.125	30	3.75
2N1044	MT-28	80	50	20	3.5	50	80	20	20-60	3	0.75	3	0.3	0.125	40	3.75
USA2N1044	MT-28	80	50	20	3	—	—	20	20-60	0.5	0.75	3	0.3	0.125	40	3.5
2N1044-1	MT-27	80	50	20	3.5	50	80	20	20-60	3	0.75	3	0.3	0.125	40	3.75
2N1044-2	TO-5	80	50	20	3.5	50	80	20	20-60	3	0.75	3	0.3	0.125	40	3.75
2N1045	MT-28	100	60	20	3.5	60	90	20	20-60	3	0.75	3	0.3	0.125	50	3.75
USA2N1045	MT-28	100	60	20	3	—	—	20	20-60	0.5	0.75	3	0.3	0.125	50	3.5
2N1045-1	MT-27	100	60	20	3.5	60	90	20	20-60	3	0.75	3	0.3	0.125	50	3.75
2N1045-2	TO-5	100	60	20	3.5	60	90	20	20-60	3	0.75	3	0.3	0.125	50	3.75
2N1136	TO-3	60	30	15	5	20	40	90	50-100	3	1	3	0.3	0.2	2	0.8
2N1136A	TO-3	90	55	15	5	40	70	90	50-100	3	1	3	0.3	0.2	2	0.8
2N1136B	TO-3	100	65	15	5	50	80	90	50-100	3	1	3	0.3	0.2	2	0.8
2N1137	TO-3	60	30	15	5	20	40	90	75-150	3	1	3	0.3	0.2	2	0.8

BENDIX PNP ALLOY POWER TRANSISTORS (CONT.)

TYPE NUMBER	CASE TYPE	VCBO V	VCEO V	VEBO V	IC A	SOAR		Pc @ 25°C CASE W	CURRENT GAIN hFE	IC A	MAX SATURATION VOLTAGE			MAX COLLECTOR CUTOFF CURRENT		θ_{J-C} °C/W
						V1 V	V2 V				VCE(s) V	IC A	IB A	ICBO mA	VCBO V	
2N1137A	TO-3	90	55	15	5	40	70	90	75-150	3	1	3	0.3	0.2	2	0.8
2N1137B	TO-3	100	65	15	5	50	80	90	75-150	3	1	3	0.3	0.2	2	0.8
2N1138	TO-3	60	30	15	5	20	40	90	100-200	3	1	3	0.3	0.2	2	0.8
2N1138A	TO-3	90	55	15	5	40	70	90	100-200	3	1	3	0.3	0.2	2	0.8
2N1138B	TO-3	100	65	15	5	50	80	90	100-200	3	1	3	0.3	0.2	2	0.8
2N1159	TO-41	80	60	20	5	—	—	90	30-75	3	1	3	0.2	8	80	1.2
2N1160	TO-41	80	60	20	7	—	—	90	20-50	5	1	5	0.5	8	80	1.2
2N1168	TO-3	50	—	20	5	—	—	90	70 min	1	0.75	3	0.1	8	50	0.8
2N1227	TO-3	40	—	10	3	—	—	50	25-320	0.5	0.8	1.5	0.05	—	—	1.5
2N1359	TO-3	50	—	25	3	25	50	90	35-90	1	1	2	0.2	3	40	0.8
2N1360	TO-3	50	—	25	3	25	50	90	60-150	1	0.8	2	0.2	3	40	0.8
2N1362	TO-3	100	—	50	3	50	80	90	35-90	1	1	2	0.2	3	75	0.8
2N1363	TO-3	100	—	50	3	50	80	90	60-150	1	0.8	2	0.2	3	75	0.8
2N1364	TO-3	120	—	60	3	70	100	90	35-90	1	1	2	0.2	3	100	0.8
2N1365	TO-3	120	—	60	3	70	100	90	60-150	1	0.8	2	0.2	3	100	0.8
2N1529	TO-3	40	20	20	5	—	—	90	20-40	3	1.5	3	0.3	0.2	2	0.8
2N1529A	TO-3	40	20	20	5	—	—	90	20-40	3	1.5	3	0.3	0.2	2	0.8
2N1530	TO-3	60	30	30	5	—	—	90	20-40	3	1.5	3	0.3	0.2	2	0.8
2N1530A	TO-3	60	30	30	5	—	—	90	20-40	3	1.5	3	0.3	0.2	2	0.8
2N1531	TO-3	80	40	40	5	—	—	90	20-40	3	1.5	3	0.3	0.2	2	0.8
2N1531A	TO-3	80	40	40	5	—	—	90	20-40	3	1.5	3	0.3	0.2	2	0.8
2N1532	TO-3	100	50	50	5	—	—	90	20-40	3	1.5	3	0.3	0.2	2	0.8
2N1532A	TO-3	100	50	50	5	—	—	90	20-40	3	1.5	3	0.3	0.2	2	0.8
2N1533	TO-3	120	60	60	5	—	—	90	20-40	3	1.5	3	0.3	0.2	2	0.8
2N1534	TO-3	40	20	30	5	—	—	90	35-70	3	1.2	3	0.3	0.2	2	0.8
2N1534A	TO-3	40	20	30	5	—	—	90	35-70	3	1.2	3	0.3	0.2	2	0.8
2N1535	TO-3	60	30	30	5	—	—	90	35-70	3	1.2	3	0.3	0.2	2	0.8
2N1535A	TO-3	60	30	30	5	—	—	90	35-70	3	1.2	3	0.3	0.2	2	0.8
2N1536	TO-3	80	40	40	5	—	—	90	35-70	3	1.2	3	0.3	0.2	2	0.8
2N1536A	TO-3	80	40	40	5	—	—	90	35-70	3	1.2	3	0.3	0.2	2	0.8
2N1537	TO-3	100	50	50	5	—	—	90	35-70	3	1.2	3	0.3	0.2	2	0.8
2N1537A	TO-3	100	50	50	5	—	—	90	35-70	3	1.2	3	0.3	0.2	2	0.8
2N1538	TO-3	120	60	60	3	—	—	90	35-70	3	1.2	3	0.3	0.2	2	0.8
2N1539	TO-3	40	20	20	3	—	—	90	50-100	3	0.6	3	0.3	0.2	2	0.8
2N1539A	TO-3	40	20	20	3	—	—	90	50-100	3	0.6	3	0.3	0.2	2	0.8
2N1540	TO-3	60	30	30	3	—	—	90	50-100	3	0.6	3	0.3	0.2	2	0.8
2N1540A	TO-3	60	30	30	3	—	—	90	50-100	3	0.6	3	0.3	0.2	2	0.8
2N1541	TO-3	80	40	40	3	—	—	90	50-100	3	0.6	3	0.3	0.2	2	0.8
2N1541A	TO-3	80	40	40	3	—	—	90	50-100	3	0.6	3	0.3	0.2	2	0.8
2N1542	TO-3	100	50	50	3	—	—	90	50-100	3	0.6	3	0.3	0.2	2	0.8
2N1542A	TO-3	100	50	50	3	—	—	90	50-100	3	0.6	3	0.3	0.2	2	0.8
2N1543	TO-3	120	60	60	3	—	—	90	50-100	3	0.6	3	0.3	0.2	2	0.8
2N1544	TO-3	40	20	20	3	—	—	90	75-150	3	0.2	3	0.3	0.2	2	0.8
2N1544A	TO-3	40	20	20	3	—	—	90	75-150	3	0.2	3	0.3	0.2	2	0.8
2N1545	TO-3	60	30	30	3	—	—	90	75-150	3	0.2	3	0.3	0.2	2	0.8
2N1545A	TO-3	60	30	30	3	—	—	90	75-150	3	0.2	3	0.3	0.2	2	0.8
2N1546	TO-3	80	40	40	3	—	—	90	75-150	3	0.2	3	0.3	0.2	2	0.8
2N1546A	TO-3	80	40	40	3	—	—	90	75-150	3	0.2	3	0.3	0.2	2	0.8
2N1547	TO-3	100	50	50	3	—	—	90	75-150	3	0.2	3	0.3	0.2	2	0.8
2N1547A	TO-3	100	50	50	3	—	—	90	75-150	3	0.2	3	0.3	0.2	2	0.8
2N1548	TO-3	120	60	60	3	—	—	90	75-150	3	0.2	3	0.3	0.2	2	0.8
2N2552	MT-27	40	30	20	3	30	60	20	20-60	1	0.25	1	0.1	0.125	20	3.75
2N2553	MT-27	60	40	20	3	40	70	20	20-60	1	0.25	1	0.1	0.125	30	3.75
2N2554	MT-27	80	50	20	3	50	80	20	20-60	1	0.25	1	0.1	0.125	40	3.75
2N2555	MT-27	100	60	20	3	60	90	20	20-60	1	0.25	1	0.1	0.125	50	3.75
2N2556	MT-28	40	30	20	3	30	60	20	20-60	1	0.25	1	0.1	0.125	20	3.75
2N2557	MT-28	60	40	20	3	40	70	20	20-60	1	0.25	1	0.1	0.125	30	3.75
2N2558	MT-28	80	50	20	3	50	80	20	20-60	1	0.25	1	0.1	0.125	40	3.75
2N2559	MT-28	100	60	20	3	60	90	20	20-60	1	0.25	1	0.1	0.125	50	3.75
2N2560	MT-27	40	30	20	3.5	30	60	20	20-60	3	0.25	1	0.1	0.125	20	3.75
2N2561	MT-27	60	40	20	3.5	40	70	20	20-60	3	0.25	1	0.1	0.125	30	3.75
2N2562	MT-27	80	50	20	3.5	50	80	20	20-60	3	0.25	1	0.1	0.125	40	3.75
2N2563	MT-27	100	60	20	3.5	60	90	20	20-60	3	0.25	1	0.1	0.125	50	3.75
2N2564	TO-5	40	30	20	3.5	30	60	20	20-60	3	0.25	1	0.1	0.125	20	3.75
2N2565	TO-5	60	40	20	3.5	40	70	20	20-60	3	0.25	1	0.1	0.125	30	3.75
2N2566	TO-5	80	50	20	3.5	50	80	20	20-60	3	0.25	1	0.1	0.125	40	3.75
2N2567	TO-5	100	60	20	3.5	60	90	20	20-60	3	0.25	1	0.1	0.125	50	3.75
2N3611	TO-3	40	25	20	7	—	—	85	35-70	3	0.20	3	0.3	0.5	25	1
2N3612	TO-3	60	35	30	7	—	—	85	35-70	3	0.20	3	0.3	0.5	40	1
2N3613	TO-3	40	25	20	7	—	—	85	60-120	3	0.15	3	0.3	0.5	25	1
2N3614	TO-3	60	35	30	7	—	—	85	60-120	3	0.15	3	0.3	0.5	40	1
2N3615	TO-3	80	50	40	7	—	—	85	30-60	3	0.25	3	0.3	1	55	1
2N3616	TO-3	100	60	50	7	—	—	85	30-60	3	0.25	3	0.3	1	65	1
2N3617	TO-3	80	50	40	7	—	—	85	45-90	3	0.20	3	0.3	1	55	1
2N3618	TO-3	100	60	50	7	—	—	85	45-90	3	0.20	3	0.3	1	65	1

BENDIX Leaf™ SILICON PLANAR EPITAXIAL NPN TRANSISTORS

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TYPE NUMBER	CASE TYPE	VCBO V	VCEO V	VEBO V	IC A	Pc @ 25°C CASE W	CURRENT GAIN			MAX SATURATION VOLTAGE			MAX COLLECTOR CUTOFF CURRENT	
							hFE —	IC mA	VCE V	VCE(s) V	IC mA	IB mA	ICBO μA	VCBO V
2N656	TO-5	60	60	8	0.5	4	30-90	200	10	5	200	40	10	30
2N656A	TO-5	60	60	8	0.5	4	30-90	200	10	2	200	40	10	30
2N657	TO-5	100	100	8	0.5	4	30-90	200	10	5	200	40	10	30
2N657A	TO-5	100	100	8	0.5	4	30-90	200	10	2	200	40	10	30
2N697	TO-5	60	40¶	5	0.5	2	40-120⊙	150	10	1.5Δ	150	15	1	30
2N698	TO-5	120	60	7	—	3	20-60	150	10	5Δ	150	15	5	75
2N699	TO-5	120	80¶	5	—	0.8§	40-120⊙	150	10	5Δ	150	15	2	60
2N699A	TO-5	120	80¶	5	—	5	40-120⊙	150	10	5	150	15	0.5	60
2N699B	TO-5	120	80	7	—	5	40-120⊙	150	10	5	150	15	10 mμ	90
2N730	TO-18	60	40¶	5	1	0.8	20-60⊙	150	10	1.5Δ	150	15	1	30
2N731	TO-18	60	40¶	5	1	1.5	40-120⊙	150	10	1.5Δ	150	15	1	30
2N870	TO-18	100	60	7	—	1.8	40-120⊙	150	10	5Δ	150	15	10 mμ	75
2N871	TO-18	100	60	7	—	1.8	100-300⊙	150	10	5Δ	150	15	10 mμ	75
2N910	TO-18	100	60	7	—	1.8	75 min⊙	10	10	0.4Δ	10	1	25 mμ	75
2N911	TO-18	100	60	7	—	1.8	35 min⊙	10	10	0.4Δ	10	1	25 mμ	75
2N912	TO-18	100	60	7	—	1.8	15 min⊙	10	10	0.4Δ	10	1	25 mμ	75
2N1253	TO-5	30	20¶	5	—	2	30-90⊙	150	10	1.5	150	15	10	20
2N1505	TO-5	50	20	3	0.5	3	7-100⊙	100	28	2	150	50	50	28
2N1506	TO-5	60	20	4	0.5	3	10-100⊙	100	28	1.5	150	50	10	28
2N1506A	TO-5	80	50	5	0.5	3.5	10-100⊙	100	28	0.6	150	50	50 mμ	28
USA2N1506A	TO-5	80	80¶	5	0.5	3.5	20-100⊙	100	28	0.6	150	15	50 mμ	28
2N1507	TO-5	60	25	5	1	2	100-300⊙	150	10	1.5Δ	150	15	1	30
2N1564	TO-5	80	60	5	0.05	0.6§	15-50	5	5	1	10	2	1	40
2N1565	TO-5	80	60	5	0.05	0.6§	30-100	5	5	1	10	2	1	40
2N1566	TO-5	80	60	5	0.05	0.6§	60-200	5	5	1	10	2	1	40
2N1572	TO-5	125	80	5	0.05	0.6§	15-50	5	5	1	10	2	1	40
2N1573	TO-5	125	80	5	0.05	0.6§	30-100	5	5	1	10	2	1	40
2N1574	TO-5	125	80	5	0.05	0.6§	60-200	5	5	1	10	2	1	40
2N1613	TO-5	75	50¶	7	1	3	40-120⊙	150	10	1.5Δ	150	15	10 mμ	60
2N1711	TO-5	75	50¶	7	1	3	100-300⊙	150	10	1.5Δ	150	15	10 mμ	60
2N1711A	TO-5	75	50¶	7	1	5	100-300⊙	150	10	1Δ	150	15	2 mμ	60
2N1711B	TO-5	120	50	7	2	5	100-300⊙	150	10	0.2Δ	150	15	2 mμ	60
2N1714	TO-5	90	60	6	1	20	20-60⊙	200	5	2Δ	200	20	1	3
2N1715	TO-5	150	100	6	1	20	20-60⊙	200	5	2Δ	200	20	1	3
2N1716	TO-5	90	60	6	1	20	40-120⊙	200	5	2Δ	200	20	1	3
2N1717	TO-5	150	100	6	1	20	40-120⊙	200	5	2Δ	200	20	1	3
2N1718	MT-13	90	60	6	1	20	20-60⊙	200	5	2Δ	200	20	1	3
2N1719	MT-13	150	100	6	1	20	20-60	200	5	2Δ	200	20	1	3
2N1720	MT-13	90	60	6	1	20	40-120⊙	200	5	2Δ	200	20	1	3
2N1721	MT-13	150	100	6	1	20	40-120⊙	200	5	2Δ	200	20	1	3
2N1889	TO-5	100	80	7	—	3	40-120⊙	150	10	5	150	15	10 mμ	75
2N1890	TO-5	100	80	7	—	3	100-300⊙	150	10	5	150	15	10 mμ	75
2N1893	TO-5	120	80	7	0.5	3	40-120⊙	150	10	5	150	15	10 mμ	90
2N1893A	TO-5	140	80	7	0.5	3	40-120⊙	150	10	2Δ	150	15	10 mμ	90
2N1973	TO-5	100	60	7	—	3	75 min⊙	10	10	0.4	10	1	25 mμ	75
2N1974	TO-5	100	60	7	—	3	35 min⊙	10	10	0.4	10	1	25 mμ	75
2N1975	TO-5	100	60	7	—	3	15 min⊙	10	10	0.4	10	1	25 mμ	75
2N1983	TO-5	50	25	5	1	2	70-210⊙	1	5	0.25	5	0.5	5	30
2N1984	TO-5	50	25	5	1	2	35-100⊙	1	5	0.25	5	0.5	5	30
2N1985	TO-5	50	25	5	1	2	10 min	5	0.25	0.25	5	0.5	5	30
2N1986	TO-5	50	25	5	—	2	60-240⊙	150	10	1.5	150	15	5	30
2N1987	TO-5	50	25	5	—	2	20-80⊙	150	10	1.5	150	15	5	30
2N1988	TO-5	100	45	5	1	2	35-120	30	10	2	30	3	5	50
2N1989	TO-5	100	45	5	1	2	20-60⊙	30	10	2	30	3	5	50
2N1990	TO-5	100	—	3	—	2	20 min⊙	30	10	0.5	2	0.2	10	75
2N2017	TO-5	60	60	8	1	5	50-200⊙	200	10	2	200	40	10	30
2N2102	TO-5	120	65	7	1	5	40-120⊙	150	10	0.5	150	15	2 mμ	60
2N2102A	TO-5	120	65	7	1	5	40-120⊙	150	10	0.3	150	15	2 mμ	60
2N2107	TO-5	60	60Δ	8	0.5	1	30-90⊙	200	10	2Δ	200	40	10	30
2N2108	TO-5	60	60Δ	8	0.5	1	75-200⊙	200	10	2Δ	200	10	10	30
2N2192	TO-5	60	40	5	1	2.8	100-300⊙	150	10	0.35	150	15	10 mμ	30
2N2192A	TO-5	60	40	5	1	2.8	100-300⊙	150	10	0.25	150	15	10 mμ	30
2N2192B	TO-5	60	40	5	1	2.8	100-300⊙	150	10	0.18	150	15	10 mμ	30
2N2193	TO-5	80	50	8	1	2.8	40-120⊙	150	10	0.35	150	15	10 mμ	60
2N2193A	TO-5	80	50	8	1	2.8	40-120⊙	150	10	0.25	150	15	10 mμ	60
2N2194	TO-5	60	40	5	1	2.8	20-60⊙	150	10	0.35	150	15	10 mμ	30
2N2194A	TO-5	60	40	5	1	2.8	20-60⊙	150	10	0.25	150	15	10 mμ	30
2N2195	TO-5	45	25	5	1	2.8	20 min⊙	150	10	0.35	150	15	100 mμ	30
2N2195A	TO-5	45	25	5	1	2.8	20 min⊙	150	10	0.25	150	15	100 mμ	30
2N2243	TO-5	120	80	7	1	2.8	40-120*	150	10	0.35	150	15	10 mμ	60
2N2270	TO-5	60	45	7	1	5	50-200*	150	10	0.9	150	15	50 mμ	60
2N2297	TO-5	80	35	7	1	5	40-120*	150	10	0.2	150	15	10 mμ	60
2N2939	TO-5	75	60	7	1	0.8§	60-240	150	10	0.75	150	15	25 mμ	60
2N2940	TO-5	120	80	7	1	0.8§	60-240	150	10	0.75	150	15	25 mμ	90
2N2941	TO-5	150	100	7	1	0.8§	60-240	150	10	0.75	150	15	25 mμ	100

¶VCER @RBE ≤ 10V, ΔVCER @RBE ≤ 1K, §TA = 25°C, ⊙Pulse width ≤ 300 μsec, duty cycle ≤ 2%, ⊙hFE @ 1 kc.
Cob = 8 pf typical, Tj = 200°C maximum, θJ-C = 23°C/W maximum (All case types), θJ-A = 165°C/W typical (TO-5 case), 250°C/W typical (TO-18 case).

BENDIX Leaf-Let™ SILICON PLANAR EPITAXIAL NPN TRANSISTORS

TYPE NUMBER	CASE TYPE	VCBO V	VCEO V	Pc @ 25°C CASE W	hFE□	MAX VCE(s)δ V	MAX COLLECTOR CUTOFF CURRENT ICBO μA	@ VCBO V	θJ-C °C/W	θJ-A °C/W
2N2217	TO-5	60	30	3	20-60	0.4	0.01	50	30	175
2N2218	TO-5	60	30	3	40-120	0.4	0.01	50	30	175
USA2N2218	TO-5	60	30	3	40-120	0.4	0.01	50	30	175
2N2218A	TO-5	75	40	3	40-120	0.3	0.01	50	30	175
2N2219	TO-5	60	30	3	100-300	0.4	0.01	50	30	175
USA2N2219	TO-5	60	30	3	100-300	0.4	0.01	50	30	175
2N2219A	TO-5	75	40	3	100-300	0.3	0.01	50	30	175
2N2220	TO-18	60	30	1.8	20-60	0.4	0.01	50	40	260
2N2221	TO-18	60	30	1.8	40-120	0.4	0.01	50	40	260
2N2221A	TO-18	75	40	1.8	40-120	0.3	0.01	50	40	260
2N2222	TO-18	60	30	1.8	100-300	0.4	0.01	50	40	260
USA2N2222	TO-18	60	30	1.8	100-300	0.4	0.01	50	40	260
2N2222A	TO-18	75	40	1.8	100-300	0.3	0.01	50	40	260
2N2845	TO-18	60	30⊙	1.2	30-120	0.4	0.2	30	40	260
2N2846	TO-5	60	30⊙	3	30-120	0.4	0.2	30	30	175
2N2847	TO-18	60	20⊙	1.2	40-140	0.4	0.2	30	40	260
2N2848	TO-5	60	20⊙	3	40-140	0.4	0.2	30	30	175

□ Pulse width ≤ 300 μsec, duty cycle ≤ 2%, IC = 150 mA, VCE = 10 V. δ Pulse width ≤ 300 μsec, duty cycle ≤ 2%, IC = 150 mA, IB = 15 mA.
 ⊙ ft = 400 mc typical. Tj = 200°C maximum. IC = 800 mA. Cob = 6 pf typical at VCBO = 10 V. τj = 150 msec typical. VEBO = 5 V.

BENDIX SILICON SINGLE-JUNCTION DIFFUSED POWER RECTIFIERS

TYPE NUMBER	Io A 150°C	MAX RMS V 150°C	PRV V 150°C	IR mA 150°C	VF V 25°C
1N607, R	±0.8	35	±50	±0.025	1.5 @ 0.2A
1N607A, RA	±0.8	35	±50	±0.001	1.5 @ 0.4A
1N608, R	±0.8	70	±100	±0.025	1.5 @ 0.2A
1N608A, RA	±0.8	70	±100	±0.001	1.5 @ 0.4A
1N609, R	±0.8	105	±150	±0.025	1.5 @ 0.2A
1N609A, RA	±0.8	105	±150	±0.001	1.5 @ 0.4A
1N612, R	±0.8	280	±400	±0.025	1.5 @ 0.2A
1N612A, RA	±0.8	280	±400	±0.0015	1.5 @ 0.4A
1N613, R	±0.8	350	±500	±0.025	1.5 @ 0.2A
1N613A, RA	±0.8	350	±500	±0.002	1.5 @ 0.4A
1N614, R	±0.8	420	±600	±0.025	1.5 @ 0.2A
1N614A, RA	±0.8	420	±600	±0.0025	1.5 @ 0.4A
1N1115, R	0.6	70	100	1	+1 @ 0.6A
1N1118, R	0.6	280	400	1	+1 @ 0.6A
1N1119, R	0.6	350	500	1	+1 @ 0.6A
1N1120, R	0.6	420	600	1	+1 @ 0.6A
1N1124, R	3	140	200	0.5	1.1 @ 6A
1N1124A, RA	1	140	200	0.2	1.1 @ 1A
USN1N1124A	1	140	200	0.25	1.1 @ 1A
1N1125, R	3	210	300	0.5	1.1 @ 6A
1N1126, R	3	280	400	0.5	1.1 @ 6A
1N1126A, RA	1	280	400	0.25	1.1 @ 1A
USN1N1126A	1	280	400	0.25	1.1 @ 1A
1N1127, R	3	350	500	0.5	1.1 @ 6A
1N1128, R	3	420	600	0.5	1.1 @ 6A
1N1128A, RA	1	420	600	0.35	1.1 @ 1A
USN1N1128A	1	420	600	0.25	1.1 @ 1A
1N1199, R	12	35	50	10	1.25 @ 12A
USAF1N1199	12	35	50	10	1.25 @ 12A
1N1200, R	12	70	100	10	1.25 @ 12A
USAF1N1200	12	70	100	10	1.25 @ 12A
1N1200A, RA	12	70	100	10	1.25 @ 12A
1N1201, R	12	105	150	10	1.25 @ 12A
USAF1N1201	12	105	150	10	1.25 @ 12A
1N1201A, RA	12	105	150	10	1.25 @ 12A
1N1202, R	12	140	200	10	1.25 @ 12A
USAF1N1202	12	140	200	10	1.25 @ 12A
JAN1N1202, R	12	140	200	6	1.2 @ 12A
1N1202A, RA	12	140	200	10	1.25 @ 12A
1N1203, R	12	210	300	10	1.25 @ 12A
USAF1N1203	12	210	300	10	1.25 @ 12A
1N1203A, RA	12	210	300	5	1.35 @ 12A
1N1204, R	12	280	400	10	1.25 @ 12A
USAF1N1204	12	280	400	10	1.25 @ 12A
JAN1N1204, R	12	280	400	6	1.2 @ 12A
1N1204A, RA	12	280	400	5	1.25 @ 12A
1N1205, R	12	350	500	10	1.25 @ 12A
USAF1N1205	12	350	500	10	1.25 @ 12A
1N1205A, RA	12	350	500	3.5	1.35 @ 12A
1N1206, R	12	420	600	10	1.25 @ 12A
USAF1N1206	12	420	600	6	1.2 @ 12A
JAN1N1206, R	12	420	600	3	1.35 @ 12A
1N1341, R	6	35	50	10	1.15 @ 6A
1N1341A, RA	6	35	50	10	1.1 @ 6A
1N1342, R	6	70	100	10	1.15 @ 6A
1N1342A, RA	6	70	100	7.5	1.1 @ 6A
1N1344, R	6	140	200	10	1.15 @ 6A
1N1343A, RA	6	105	150	6.75	1.1 @ 6A
1N1343, R	6	105	150	10	1.15 @ 6A
1N1344A, RA	6	140	200	6	1.1 @ 6A
1N1345, R	6	210	300	10	1.15 @ 6A
1N1345A, RA	6	210	300	10	1.1 @ 6A
1N1346, R	6	280	400	10	1.15 @ 6A
1N1346A, RA	6	280	400	4.5	1.1 @ 6A
1N1347, R	6	350	500	10	1.15 @ 6A
1N1347A, RA	6	350	500	3.75	1.1 @ 6A
1N1348, R	6	420	600	10	1.15 @ 6A
1N1348A, RA	6	420	600	3	1.1 @ 6A
1N1537, R	2.5	35	50	0.5	1 @ 1.6A
1N1538, R	2.5	40	100	0.5	1 @ 1.6A
1N1539, R	2.5	105	150	0.5	1 @ 1.6A
1N1540, R	2.5	140	200	0.5	1 @ 1.6A
1N1541, R	2.5	210	300	0.5	1 @ 1.6A
1N1542, R	2.5	280	400	0.5	1 @ 1.6A
1N1543, R	2.5	350	500	0.5	1 @ 1.6A
1N1544, R	2.5	420	600	0.5	1 @ 1.6A
1N1581, R	3	35	50	0.5	1.5 @ 6A
1N1582, R	3	70	100	0.5	1.5 @ 6A
1N1583, R	3	140	200	0.5	1.5 @ 6A
1N1584, R	3	210	300	0.5	1.5 @ 6A
1N1585, R	3	280	400	0.5	1.5 @ 6A
1N1586, R	3	350	500	0.5	1.5 @ 6A
1N1587, R	3	420	600	0.5	1.5 @ 6A
1N1612, R	5	35	50	1	1.5 @ 10A
1N1612A, RA	5	35	50	0.5	1.1 @ 5A
1N1613, R	5	70	100	1	1.5 @ 10A
1N1613A, RA	5	70	100	0.5	1.1 @ 5A
1N1614, R	5	140	200	1	1.5 @ 10A
USA1N1614, R	5	168	240	0.5	1.5 @ 10A
JAN1N1614, R	5	168	240	0.5	1.5 @ 15A
1N1614A, RA	5	140	200	0.5	1.1 @ 5A
1N1615, R	5	280	400	1	1.5 @ 10A
USA1N1615, R	5	336	480	0.5	1.5 @ 10A
JAN1N1615, R	5	336	480	0.5	1.5 @ 15A
1N1615A, RA	5	280	400	0.5	1.1 @ 5A
1N1616, R	5	420	600	1	1.5 @ 10A
USA1N1616, R	5	504	720	0.5	1.5 @ 10A
JAN1N1616, R	5	504	720	0.5	1.5 @ 15A
1N1616A, RA	5	420	600	0.5	1.1 @ 5A

BENDIX SILICON SINGLE-JUNCTION DIFFUSED POWER RECTIFIERS (CONT.)

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TYPE NUMBER	I _o A 150°C	MAX RMS V 150°C	PRV V 150°C	IR mA 150°C	VF V 25°C
1N2218, R	0.4	350	500	1.5	1.2 @ 1.5A
1N2220, R	0.4	420	600	1.5	1.2 @ 1.5A
1N2222, R	0.3	560	800	2.25	1.2 @ 1A
1N2224, R	0.3	700	1000	2.25	1.2 @ 1A
1N2224A, RA	0.3	700	1000	1.15	1.2 @ 1A
1N2228, R	1	35	50	1.5	1.2 @ 5A
1N2228A, RA	1.6	35	50	1	1.2 @ 5A
1N2230, R	1	140	200	1.5	1.2 @ 5A
1N2230A, RA	1.6	140	200	1	1.2 @ 5A
1N2232, R	1	210	300	1.5	1.2 @ 5A
1N2232A, RA	1.6	210	300	1	1.2 @ 5A
1N2234, R	1	280	400	1.5	1.2 @ 5A
1N2234A, RA	1.6	280	400	1	1.2 @ 5A
1N2236, R	1	350	500	1.5	1.2 @ 5A
1N2236A, RA	1.6	350	500	1	1.2 @ 5A
1N2238, R	1	420	600	1.5	1.2 @ 5A
1N2238A, RA	1.6	420	600	1	1.2 @ 5A
1N2240, R	1.5	560	800	2.25	1.2 @ 1.5A
1N2240A, RA	1.6	560	800	1	1.2 @ 1.6A
1N2242, R	1.5	700	1000	2.25	1.2 @ 1.5A
1N2242A, RA	1.6	700	1000	1	1.2 @ 1.6A
1N2246, R	3	35	50	3	1.2 @ 10A
1N2246A, RA	3	35	50	1.5	1.2 @ 10A
1N2248, R	3	70	100	3	1.2 @ 10A
1N2248A, RA	3	70	100	1.5	1.2 @ 10A
1N2250, R	3	140	200	3	1.2 @ 10A
1N2250A, RA	3	140	200	1.5	1.2 @ 10A
1N2252, R	3	210	300	3	1.2 @ 10A
1N2252A, RA	3	210	300	1.5	1.2 @ 10A
1N2254, R	3	280	400	3	1.2 @ 10A
1N2254A, RA	3	280	400	1.5	1.2 @ 10A
1N2256, R	3	350	500	3	1.2 @ 10A
1N2256A, RA	3	350	500	1.5	1.2 @ 10A
1N2258, R	3	420	600	3	1.2 @ 10A
1N2258A, RA	3	420	600	1.5	1.2 @ 10A
1N2260, R	3	560	800	15	1.2 @ 10A
1N2260A, RA	3	560	800	3	1.2 @ 10A
1N2262, R	3	700	1000	15	1.2 @ 10A
1N2262A, RA	3	700	1000	3	1.2 @ 10A
1N2272, R	6	35	50	1	1.2 @ 10A

TYPE NUMBER	I _o A 150°C	MAX RMS V 150°C	PRV V 150°C	IR mA 150°C	VF V 25°C
1N2274, R	6	140	200	1	1.2 @ 20A
1N2276, R	6	280	400	1	1.2 @ 20A
1N2278, R	6	420	600	1	1.2 @ 20A
1N2491, R	6	35	50	2	1.1 @ 6A
1N2492, R	6	70	100	2	1.1 @ 6A
1N2493, R	6	140	200	2	1.1 @ 6A
1N2494, R	6	210	300	2	1.1 @ 6A
1N2495, R	6	280	400	2	1.1 @ 6A
1N2496, R	6	350	500	2	1.1 @ 6A
1N2497, R	6	420	600	2	1.1 @ 6A
1N2512, R	1	70	100	†2	1.1 @ 1A
1N2513, R	1	140	200	†2	1.1 @ 1A
1N2514, R	1	210	300	†2	1.1 @ 1A
1N2515, R	1	280	400	†2	1.1 @ 1A
1N2516, R	1	350	500	†2	1.1 @ 1A
1N2517, R	1	420	600	†2	1.1 @ 1A
1N3571, R	1.25	210	300	0.4	1.3 @ 3.5A
1N3572, R	1.25	280	400	0.4	1.3 @ 3.5A
1N3573, R	1.25	350	500	0.4	1.3 @ 3.5A
1N3574, R	1.25	420	600	0.4	1.3 @ 3.5A
1N3649, R	1	560	800	0.2	1.1 @ 1A
1N3650, R	1	700	1000	0.2	1.1 @ 1A
1N3670, R	†12	490	700	3	2.05 @ 12A
1N3670A, RA	†12	490	700	0.9	1.35 @ 12A
1N3671, R	†12	560	800	3	2.05 @ 12A
1N3671A, RA	†12	560	800	0.8	1.35 @ 12A
1N3672, R	†12	630	900	3	2.05 @ 12A
1N3672A, RA	†12	630	900	0.7	1.35 @ 12A
1N3673, R	†12	700	1000	2	2.05 @ 12A
1N3673A, RA	†12	700	1000	0.6	1.35 @ 12A
1N3987, R	†6	490	700	0.9	1.4 @ 6A
1N3989, R	†6	630	900	0.7	1.4 @ 6A
1N3990, R	†6	700	1000	0.6	1.4 @ 6A
1N4458, R	5	560	800	0.5	+ 1.5 @ 5A
JAN1N4458, R	5	672	960	0.5	1.5 @ 15A
1N4459, R	5	700	1000	0.5	+ 1.5 @ 5A
JAN1N4459, R	5	840	1200	0.5	1.5 @ 15A

θJ-C = 4°C/W typical. †25°C. +150°C.
All types packaged to JEDEC DO-4 outline.

BENDIX MILITARY TYPE SEMICONDUCTORS RECTIFIERS

TYPE NUMBER	I _o A 150°C	PRV V 150°C	VF V 25°C	MEETING MILITARY SPECIFICATION
USN1N124A	1	200	1.1 @ 1A	MIL-S-19500/104B
USN1N126A	1	400	1.1 @ 1A	MIL-S-19500/104B
USN1N128A	1	600	1.1 @ 1A	MIL-S-19500/104B
USAF1N199	12	50	1.25 @ 12A	MIL-E-1/1108
USAF1N200	12	100	1.25 @ 12A	MIL-E-1/1108
USAF1N201	12	150	1.25 @ 12A	MIL-E-1/1108
USAF1N202	12	200	1.25 @ 12A	MIL-E-1/1108
JAN1N202, R	12	200	1.2 @ 12A	MIL-S-19500/260
USAF1N203	12	300	1.25 @ 12A	MIL-E-1/1108
USAF1N204	12	400	1.25 @ 12A	MIL-E-1/1108
JAN1N204, R	12	400	1.2 @ 12A	MIL-S-19500/260

TYPE NUMBER	I _o A 150°C	PRV V 150°C	VF V 25°C	MEETING MILITARY SPECIFICATION
USAF1N205	12	500	1.25 @ 12A	MIL-E-1/1108
USAF1N206	12	600	1.25 @ 12A	MIL-E-1/1108
JAN1N206, R	12	600	1.2 @ 12A	MIL-S-19500/260
USA1N1614, R	5	240	1.5 @ 10A	MIL-S-19500/162A
JAN1N1614, R	5	240	1.5 @ 15A	MIL-S-19500/162B
USA1N1615, R	5	480	1.5 @ 10A	MIL-S-19500/162A
JAN1N1615, R	5	480	1.5 @ 15A	MIL-S-19500/162B
USA1N1616, R	5	720	1.5 @ 10A	MIL-S-19500/162A
JAN1N1616, R	5	720	1.5 @ 15A	MIL-S-19500/162B
JAN1N4458, R	5	960	1.5 @ 15A	MIL-S-19500/162B
JAN1N4459, R	5	1200	1.5 @ 15A	MIL-S-19500/162B

Packaged to JEDEC DO-4 outline.

TRANSISTORS

TYPE NUMBER	CASE TYPE	VCBO V	VCEO V	IC A	Pc @ 25°C CASE W	CURRENT GAIN hFE	IC A	MAX COLLECTOR CUTOFF CURRENT ICBO μA	VCBO V	MEETING MILITARY SPECIFICATION
USA2N297A	TO-3	60	40	5	35	40-100	0.5	200	2	MIL-T-19500/36A
JAN2N297A	TO-3	80	40	5	50	40-100	0.5	150	2	MIL-S-19500/36B
USA2N456A	TO-3	40	20	7	150	30-90	5	500	20	MIL-S-19500/217
USA2N457A	TO-3	60	30	7	150	30-90	5	500	30	MIL-S-19500/217
USA2N458A	TO-3	80	40	7	150	30-90	5	500	40	MIL-S-19500/217

BENDIX MILITARY TYPE SEMICONDUCTORS – TRANSISTORS (CONT.)

TYPE NUMBER	CASE TYPE	VCBO V	VCEO V	IC A	Pc @ 25°C CASE W	CURRENT GAIN		MAX COLLECTOR CUTOFF CURRENT		MEETING MILITARY SPECIFICATION
						hFE —	IC A	ICBO μA	VCBO V	
USA2N1011	TO-3	80	40	5	10	30-75	3	200	2	MIL-T-19500/67
USA2N1021	TO-3	100	50	7	150	30-90	5	500	50	MIL-S-19500/217
USA2N1022	TO-3	120	50	7	150	30-90	5	500	60	MIL-S-19500/217
USN2N1039	TO-5	60	40	3	20	20-60	1	70	30	MIL-S-19500/89
JAN2N1039	TO-5	60	40	3	20	20-60	1	70	30	MIL-S-19500/89C
USN2N1041	TO-5	100	60	3	20	20-60	1	70	50	MIL-S-19500/89
JAN2N1041	TO-5	100	60	3	20	20-60	1	70	50	MIL-S-19500/89C
USA2N1042	MT-28	40	30	3	20	20-60	3	125	20	MIL-S-19500/137A
USA2N1043	MT-28	60	40	3	20	20-60	3	125	30	MIL-S-19500/137A
USA2N1044	MT-28	80	50	3	20	20-60	3	125	40	MIL-S-19500/137A
USA2N1045	MT-28	100	60	3	20	20-60	3	125	50	MIL-S-19500/137A
USA2N1120	TO-41	80	40	15	45	20-50	10	300	2	MIL-T-19500/68
USN2N1165	TO-41	80	40	25	90	15-65	25	225	2	MIL-S-19500/178A
USA2N1487	TO-3	60	40	6	75	15-45	1.5	25	30	MIL-S-19500/208
USA2N1488	TO-3	100	55	6	75	15-45	1.5	25	30	MIL-S-19500/208
USA2N1489	TO-3	60	40	6	75	25-75	1.5	25	30	MIL-S-19500/208
USA2N1490	TO-3	100	55	6	75	25-75	1.5	25	30	MIL-S-19500/208
USA2N1506A	TO-5	80	50	0.5	3.5	20-100	0.1	50 mμ	28	MIL-S-19500/265
USA2N1651	TO-41	60	30	25	100	35-100	10	300	2	MIL-S-19500/219A
USA2N1652	TO-41	100	60	25	100	35-100	10	300	2	MIL-S-19500/219A
USA2N1653	TO-41	120	80	25	100	35-100	10	300	2	MIL-S-19500/219A
USA2N2218	TO-5	60	30	0.8	3	40-120	0.15	0.01	50	MIL-S-19500/251C
USA2N2219	TO-5	60	30	0.8	3	100-300	0.15	0.01	50	MIL-S-19500/251C
USA2N2222	TO-18	60	30	0.8	1.8	100-300	0.15	0.01	50	MIL-S-19500/255C

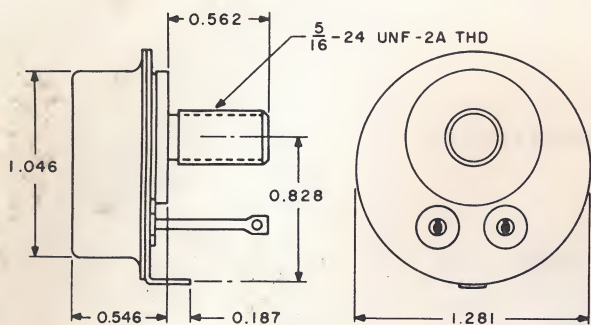
BENDIX Ignistors™

TYPE NUMBER	CASE TYPE	VCE(sus) @ IC		MIN hFE @ IC		MAX VCE(s) @ IC & IB			TYPE NUMBER	CASE TYPE	VCE(sus) @ IC		MIN hFE @ IC		MAX VCE(s) @ IC & IB		
		V	A	—	A	V	A	A			V	A	—	A	V	A	A
B-10060	TO-3	80	6	25	12	0.7	12	0.6	B-10065	TO-41	80	6	25	12	0.7	12	0.6
B-10061	TO-3	80	6	15	12	0.7	12	1.2	B-10066	TO-41	80	6	15	12	0.7	12	1.2
B-10062	TO-3	80	3	25	12	0.7	12	0.6	B-10067	TO-41	80	3	25	12	0.7	12	0.6
B-10063	TO-3	80	3	15	12	0.7	12	1.2	B-10068	TO-41	80	3	15	12	0.7	12	1.2

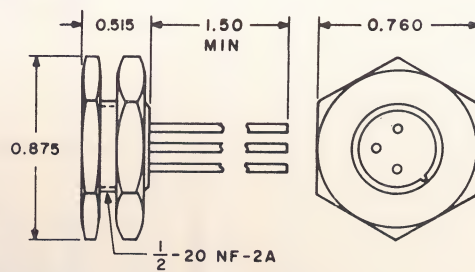
BENDIX TRANSISTOR MOUNTING KITS

MOUNTING KIT NUMBER	FOR CASE TYPE	EMITTER LEAD DIAMETER	SOCKET	INSULATOR		NYLON BUSHINGS
				ANODIZED ALUMINUM	TEFLON FIBERGLASS	
210-6500	COPPER PLATFORM	0.040"	210-6400	210-6103	—	210-6300
210-6501		0.060"	210-6401	210-6103	—	210-6300
210-6502		0.040"	210-6400	—	210-6112	210-6300
210-6503		0.060"	210-6401	—	210-6112	210-6300
210-6504		—	—	210-6103	—	210-6300
210-6505		—	—	—	210-6112	210-6300
210-6517	STEEL PLATFORM	0.040"	210-6400	210-6103	—	210-6307
210-6518		0.040"	210-6400	—	210-6112	210-6307
210-6521		—	—	210-6103	—	210-6307
210-6522		—	—	—	210-6112	210-6307

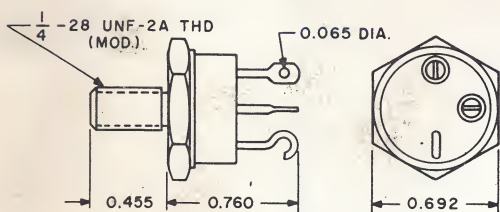
SEMICONDUCTOR OUTLINES



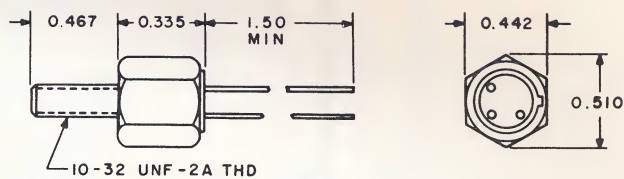
MT-1



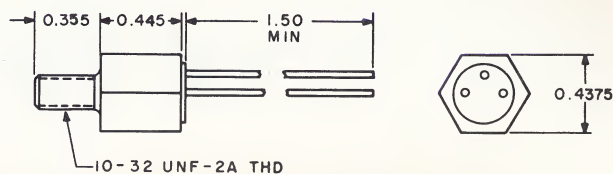
MT-28



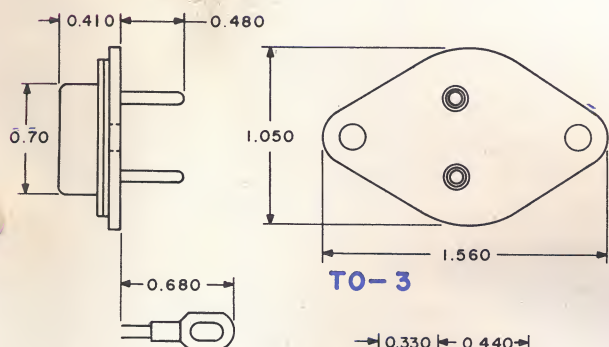
TO-61



MT-13



MT-27



TO-3

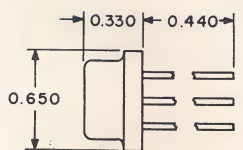


TO-5

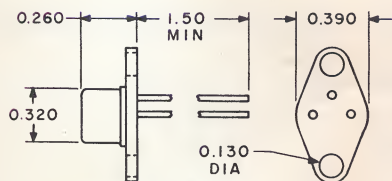
TO-18



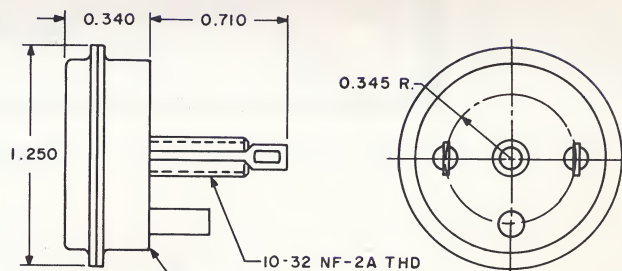
TO-41



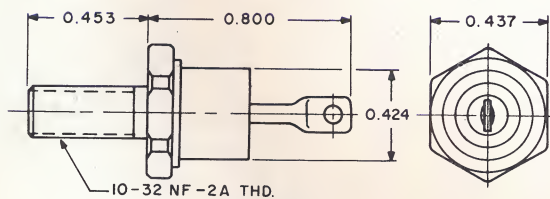
TO-8



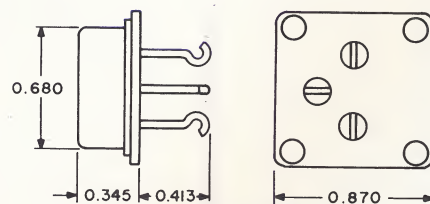
TO-37



TO-36



DO-4

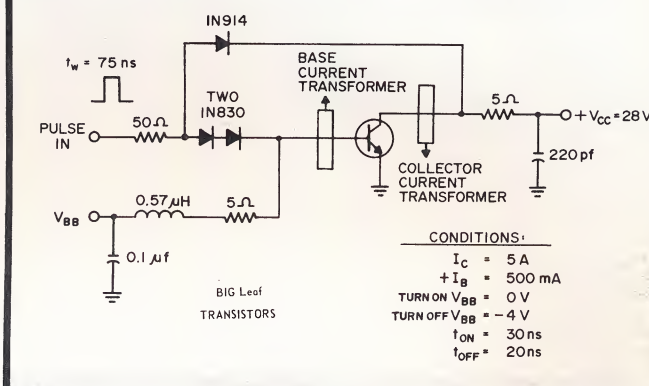


TO-53

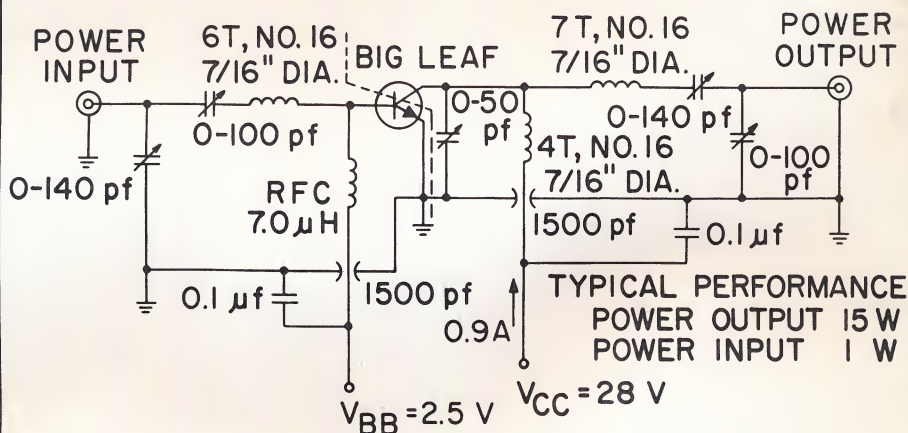
NOTES:
ALL DIMENSIONS IN INCHES.
ALL DIMENSIONS ARE MAXIMUM
UNLESS OTHERWISE INDICATED.

APPLICATIONS

TYPICAL NONSATURATED SWITCHING CIRCUIT



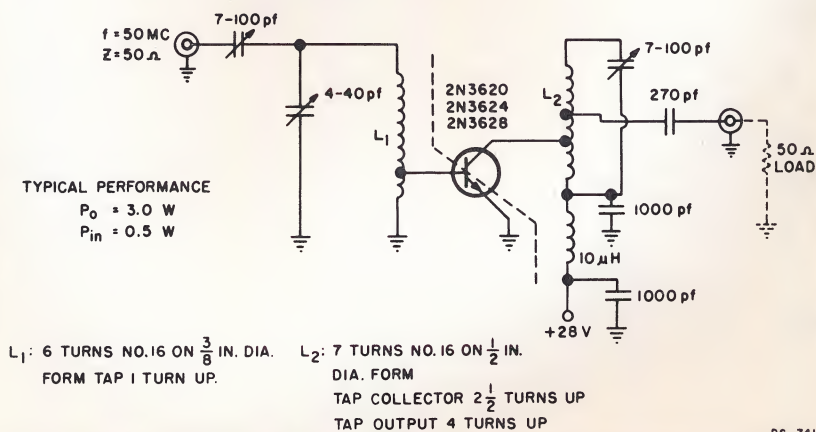
50 MC POWER AMPLIFIER



DS-739M
121564

2N3629, 2N3630

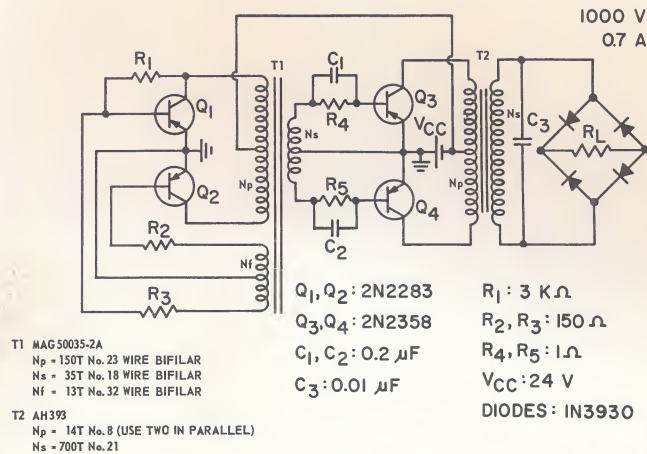
50 MC AMPLIFIER POWER GAIN CIRCUIT



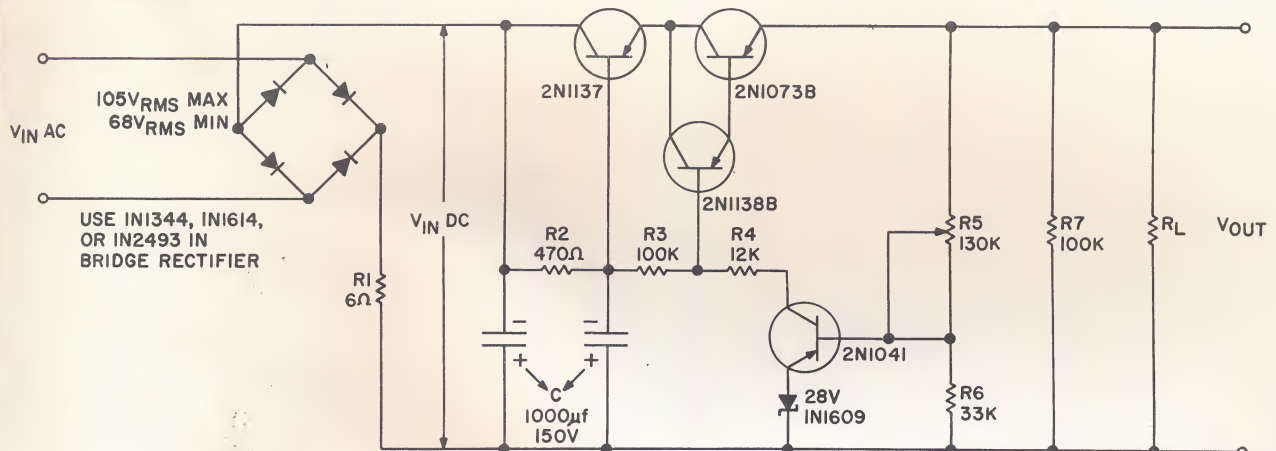
DS-741
121564

APPLICATIONS

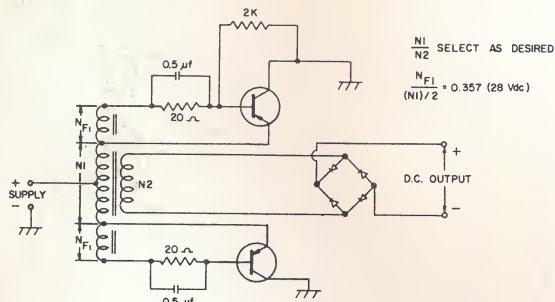
700 W DC-DC CONVERTER



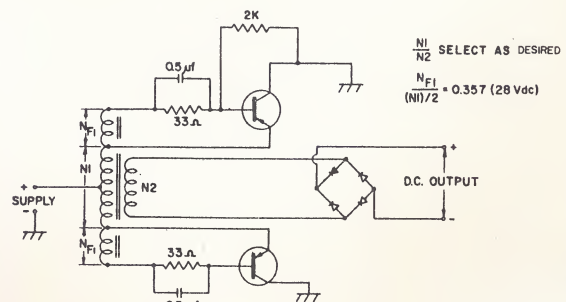
POWER SUPPLY 90V, 0-700MA



TYPICAL CONVERTER CIRCUITS



TRANSISTOR TYPE	SUPPLY Vdc	CURRENT Adc	OUTPUT POWER (80% EFF.) WATTS
2N1136	14	5.0	56
2N1136 A	28	5.0	112
2N1136 B	28	5.0	112



TRANSISTOR TYPE	SUPPLY Vdc	CURRENT Adc	OUTPUT POWER (80% EFF.) WATTS
2N637, 8, 9	14	3.0	34
2N637A, 8A, 9A	28	3.0	68
2N637B, 8B, 9B	28	3.0	68

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